

# Work Order ID 79875

**\*79875\***

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February 6, 2012 3:59:55 PM

Item ID: D6101-007 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Saddle Billet  
 Start Date: 2/06/12 Start Qty: 40.00 **\*40\*** Cust Item ID:  
 Required Date: 2/10/12 Req'd Qty: 40.00 **\*40\*** Customer:  
 Reference:

Approvals: Process Plan: CZ Date: 12/02/06 Tooling: Date: Run Start **\*NR1\***  
 QC: Date: SPC (Y/N): Date: Stop **\*NR2\***

| Sequence ID/<br>Work Center ID | Operation<br>Description | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

| Draw Nbr | Revision Nbr |
|----------|--------------|
| D6101    | Rev B        |

|     |            |      |
|-----|------------|------|
| 100 | PURCHASING | 0.00 |
|-----|------------|------|

**\*100\***  
 Purchasing  
 Purchasing

Memo  
 Issue P/O: 16108  
 a) Description: Alluminum billet  
 b) 7.750" x 8.250" x 2.50" thick  
 c) Tolerance on all dimensions are +0.030"/-0.000"  
 d) Grain direction along 7.750" length  
 e) Material: 7075-T7351 (QQ-A-250/12)  
 f) Material certification required

CZ 12/02/06 40

|     |  |      |
|-----|--|------|
| 110 | Receive & Inspect for Damage & Mat'l Certs | 0.00 |
|-----|--|------|

**\*110\***  
 Packaging  
 Packaging

Memo  
 Ensure material certification is attached

C142/16 (40)

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

NOTE: Date & initial all entries

# Work Order ID 79875

**\*79875\***

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February 6, 2012 3:59:55 PM

Item ID: D6101-007 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Saddle Billet  
 Start Date: 2/06/12 Start Qty: 40.00 **\*40\*** Cust Item ID:  
 Required Date: 2/10/12 Req'd Qty: 40.00 **\*40\*** Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

| Sequence ID/<br>Work Center ID | Operation<br>Description                            | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 120                            | QC6- Inspect dimensions to drawing                  | 0.00                 |         |        |              |               |               |                  |                |
| <b>*120*</b>                   |   |                      |         |        |              |               |               |                  |                |
| QC                             | Memo  | 0.00                 |         |        |              |               |               |                  |                |
| Quality Control                | Ensure Material certification comply to Dwg D6101   |                      |         |        |              |               |               |                  |                |
| 130                            | Identify as per dwg & Stock Location: <u>NAT 42</u> | 0.00                 |         |        |              |               |               |                  |                |
| <b>*130*</b>                   |   |                      |         |        |              |               |               |                  |                |
| Packaging                      | Memo  | 0.00                 |         |        |              |               |               |                  |                |
| Packaging                      |   |                      |         |        |              |               |               |                  |                |
| 140                            | QC21- Final Inspection - Work Order Release         | 0.00                 |         |        |              |               |               |                  |                |
| <b>*140*</b>                   |   |                      |         |        |              |               |               |                  |                |
| QC                             | Memo  | 0.00                 |         |        |              |               |               |                  |                |
| Quality Control                |   |                      |         |        |              |               |               |                  |                |

12/2/21  
40

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

NOTE: Date & initial all entries

# Picklist Print

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Page 1

Work Order ID: 79875

Parent Item: D6101-007

Parent Item Name: Saddle Billet

Start Date: 2/06/12

Required Date: 2/10/12

Start Qty: 40.00

Required Qty: 40.00

Comments: IPP A: 01.05.04New IssueEC

| Component Item ID/<br>Item Name        | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Qty per Kit | Total<br>Qty | Qty<br>Issued | Date<br>Issued | Status |
|--|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| D6101-007P<br>7075-T7351 8.25X7.75X2.5 |                        | Purchased     | No          |                     |                  | 110             | Each               | 0.0000         | 1           | 40           |               | 2/2/12 (40)    |        |

# Dart Aerospace Ltd

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

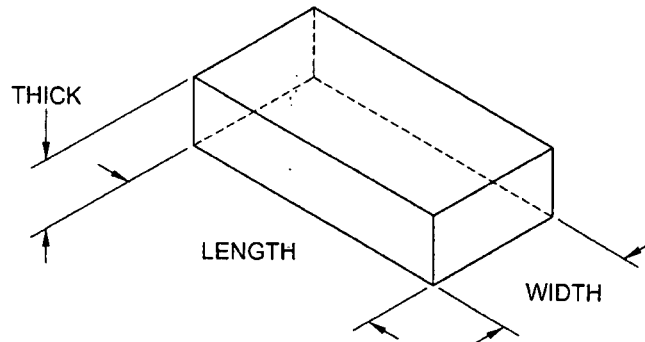
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

# SPECIFICATION CONTROL DRAWING



PURCHASE MATERIAL ACCORDING TO THE FOLLOWING TABLE. SPECIFY ALLOY, LENGTH x WIDTH x THICK (+0.030/-0.000), AND GRAIN DIRECTION AS SHOWN.

TOLERANCES ON ALL DIMENSIONS ARE +0.030/-0.000.

ALL DIMENSIONS ARE IN INCHES.

**B** ACCEPTABLE SPECIFICATIONS FOR 7075-T7351 ALUMINUM ARE AMS-QQ-A-250/12, QQ-A-250/12, OR ASTM B209

| Part No.  | Alloy                    | Length | Width | Thick | Grain Direction    |
|-----------|--------------------------|--------|-------|-------|--------------------|
| D6101-001 | 7075-T7351 (QQ-A-250/12) | 6.000  | 6.250 | 2.000 | Along 6.000 Length |
| D6101-003 | 7075-T7351 (QQ-A-250/12) | 7.875  | 6.250 | 2.000 | Along 7.875 Length |
| D6101-005 | 7075-T7351 (QQ-A-250/12) | 5.000  | 8.250 | 2.500 | Along 5.000 Length |
| D6101-007 | 7075-T7351 (QQ-A-250/12) | 7.750  | 8.250 | 2.500 | Along 7.750 Length |
| D6101-009 | 7075-T7351 (QQ-A-250/12) | 8.700  | 8.250 | 2.500 | Along 8.700 Length |
| D6101-011 | 7075-T7351 (QQ-A-250/12) | 9.700  | 8.250 | 2.500 | Along 9.700 Length |
| D6101-013 | 7075-T7351 (QQ-A-250/12) | 10.100 | 8.250 | 2.500 | Along 10.10 Length |
| D6101-015 | 7075-T7351 (QQ-A-250/12) | 9.450  | 6.250 | 2.500 | Along 9.450 Length |
| D6101-017 | 7075-T7351 (QQ-A-250/12) | 6.350  | 6.250 | 2.250 | Along 6.350 Length |
|           |                          |        |       |       |                    |
|           |                          |        |       |       |                    |

**B**

C212102106  
WID: 79875

**RELEASED**  
09/07/15/WJ

|            |                                     |  |              |
|------------|-------------------------------------|--|--------------|
| B          | ADDED D6101-015/-017, ADD ASTM B209 | RF   | 09.04.23     |
| A          | NEW ISSUE                           | CP   | 01.03.30     |
| REV.       | DESCRIPTION                         | BY   | DATE         |
| DESIGN     | CP                                  | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA   |              |
| DRAWN      | RF                                  |  |              |
| CHECKED    | <i>[Signature]</i>                  | DRAWING NO.  | REV. B       |
| MFG. APPR. | <i>[Signature]</i>                  | D6101  | SHEET 1 OF 1 |
| APPROVED   | <i>[Signature]</i>                  | TITLE  | SCALE        |
| DE APPR.   | <i>[Signature]</i>                  | SADDLE BILLET, 7075  | NTS          |
| DATE       | 09.04.23                            | <small>COPYRIGHT © 2001 BY DART AEROSPACE LTD<br/>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small> |              |

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries



**Castle Metals®**

A. M. Castle &amp; Co.

## BORDEREAU DE MARCHANDISES

Page 1 of 2

No de Formulaire d'Emballage / Shipment No: 1188092

|   |               |   |  |  |  |  |  |
|---|---------------|---|--|--|--|--|--|
| <b>Expédié de / Ship From:</b>  |               | <b>Vendu à / Sold To:</b>   |  | <b>Expédié à / Ship To:</b>  |  | <b>Livré à / Deliver To:</b>   |  |
| A. M. Castle & Co. (Canada)<br>Inc.<br>MONTREAL<br>835-SELKIRK AVENUE<br>POINTE CLAIRE, QUEBEC<br>H9R 3S2 |               | DART AEROSPACE LTD<br>1270 ABERDEEN<br>HAWKESBURY, ON K6A 1K7<br>CA |  | WILL CALL-MONTREAL<br>1270 ABERDEEN<br>HAWKESBURY, ON K6A<br>1K7 CAN |  | WILL CALL-MONTREAL<br>835 SELKIRK AVENUE<br>POINTE CLAIRE, QC<br>H9R 3S2<br>CA |  |
| <b>Date d'expédition<br/>/ Date Shipped</b>   | <b>F.O.B.</b> | <b>Modalités de transport /<br/>Freight Terms</b>                   |  | <b>Transporteur / Carrier</b>  |  | <b>No du Bon de connaissance<br/>/ BOL No</b>                                  |  |
| 15-FEB-2012   | ORIGIN        | Prepaid   |  | MANITOULIN   |  | 1188092-2  |  |

|  |  |
|--|--|
| <b>Détails d'expédition / Shipment Details</b> | <b>Destination finale / Final Destination Branch - MON</b> |
|--|--|

| N° de commande /<br>Order No | N° de ligne<br>Line No | N° d'article / Item No | Description   |
|------------------------------|------------------------|------------------------|---|
| 1992469                      | 2                      | 752241.MO              | 2.5000.PL.7075.T7351.ALUMINUM.USI.48.5000.144.5000<br>CUT 2SIDED TO 8.25 IN ( + .0310/- .0000 IN (GRAIN TO RUN<br>ALONG 7.75")) X 7.75 IN ( + .0310/- .0000 IN (GRAIN TO RUN<br>ALONG 7.75")) - ALUMINUM PLATE SAW SPECIFICATIONS:<br>QQ-A-250/12 |

| N° de bon de commande /<br>Purchase Order No | Nbre de pièces /<br>Part Number | Qté commandée / Ordered Qty | Qté Facturée /<br>Invoice Qty |
|--|---------------------------------|-----------------------------|-------------------------------|
| 16108  | YOUR ITEM NUMBER:<br>D6101-007  | 40.00 PCS                   | 40.0000 PCS                   |

|  |                    |                                       |                               |                              |  |  |   |
|--|--------------------|---------------------------------------|-------------------------------|------------------------------|--|--|---|
| <b>Détails / Details</b>                       |                    |                                       |                               |                              |  |  |   |
| <b>N° de<br/>livraison /<br/>Delivery No :</b> | <b>Usine / MNI</b> | <b>No de coulée /<br/>Heat Number</b> | <b>Code méc<br/>/ Mech Id</b> | <b>Pièce<br/>s /<br/>PCS</b> | <b>Largeur (Pouce)/<br/>Width (IN)</b> | <b>Longueur (Pouce)/<br/>Length (IN)</b> | <b>Qté expédiée/<br/>Shipped Qty(LBS)</b> |
| 117362931                                      |                    | 433111                                |                               | 5                            |  |  | 82.66                                     |
| 117362931                                      |                    | 433111                                |                               | 15                           |  |  | 247.98                                    |
| 117362931                                      |                    | 527601                                |                               | 4                            |  |  | 66.13                                     |
| 117362931                                      |                    | 527601                                |                               | 16                           |  |  | 264.51                                    |

Ces marchandises/technologies sont sujettes aux règlements de l'Export Administration et du département d'état des Etats-Unis. Si elles ont été/sont exportées, elles doivent se conformer à ces règlements. Toute modification du contrat de transport contraire aux lois des États-Unis est interdite.

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A. M. Castle & Co.

**BORDEREAU DE MARCHANDISES**

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|  |       |       |
|--|-------|-------|
| <p>These commodities/technologies are subject to US Export Administration &amp; US State Dept. Regulations and, if intended for export, were/are exported thereunder. Diversion contrary to US Law is Prohibited.</p> <p>Nous certifions par la présente que le matériel couvert par cette certification est conforme aux spécifications susmentionnées et aux exigences applicables pour le matériel, y compris toute spécification faisant partie de la description. Les rapports d'essai sont archivés pour fins de consultation. Toute requête concernant du matériel défectueux sera rejetée à moins qu'elle ne soit faite par écrit à A. M. Castle &amp; Co. dans les 60 jours suivant la livraison. Le matériel coupé sur mesure ou coupé par le client ne peut être retourné pour crédit.</p> <p>We hereby certify the material covered by this certification conforms in accordance with the above specifications and has been found to meet the applicable requirements for the material, including any specifications forming a part of the description. Test reports are on file subject to examination. All claims for defective material are waived unless made in writing to A.M. Castle &amp; Co. within 60 days of the shipment. Material cut to the correct size, or material cut by the customer cannot be returned for credit.</p> <p>Ce matériel a été reçu et inspecté par</p> |       |       |
| Reviewed by Authorized Castle Metals Representative:   | Date: | Name: |

# CERTIFIED INSPECTION REPORT

Alcoa Inc.

PITTSBURGH, PA DAVENPORT WORKS

Ship From: RIVERDALE, IA.

We hereby certify that the material covered by this certificate has been inspected with and has been found to meet the applicable requirements described therein, including any specifications forming a part of the description and that samples representative of the material met the composition limits and had the mechanical properties shown on the face of this sheet.

Per

*Malcolm Murphy*

Malcolm Murphy  
Director of Manufacturing Davenport Works

*Kenton P. Young*

Kenton P. Young  
Quality Assurance Manager

|                            |  |             |              |      |        |
|----------------------------|--|-------------|--------------|------|--------|
| 1028639                    | 0  |             |              |      |        |
| Ship Date                  | B.L. No.                                   | Invoice No. | Alcoa No.    | Item | Page 1 |
| 2009-07-06                 | 4066185                                    | 00000       | 1000117894-1 |      |        |
| P.O. No./Govt Contract No. | Customer                                   | Alcoa Item  | Mfg Order    |      |        |
| 8876                       | A M CASTLE&COMPAG041109843R02DS-17894-01-1 |             |              |      |        |

Ship To: A M CASTLE & COMPANY  
12 CASCADE BOULEVARD  
ORANGE 06477 CT

## Item Description

2.5 IN TK (+.075 -.075) X 48.5 IN W (+.3125 - 0.000) X 144.5 IN LN (+.5 -.0) CAT X 752241 (N) A/T 7075-  
T7351 RECTANGLE MILL FINISH, US1 3MM DEAD ZONE REQ'D BOTH SIDES,  
SAWED 752241. AMS-QQ-A-250/12 IS 2007 AMS-STD-2154 EXC MRK AMS4078 REV G BSS7055 REV A  
CST1006 REV D GAMP59101 REV B EXC MRK MMS159  
REV N PS21211 REV K {(MARKED)} NOT  
INTERLEAVED MAX GROSS SKID WGT: 5000 LB QUAN TOL +/-  
40 % US1 CL A 3 MM CQR 0222142 REV 02 CUST REQ 09-06-22 \*\*\* W/B 09-06-27 \*\*\*

| Num | Package Ticket      | Lot    | Weight | Quantity | UOM | Pc Id/Serl |
|-----|---------------------|--------|--------|----------|-----|------------|
| 1   | 741658              | 527601 | 1788   | 1        | PC  | :          |
|     | Clock Nmbr (47118 ) |        |        |          |     |            |
| 2   | 741662              | 527601 | 3560   | 2        | PC  | :          |
|     | Clock Nmbr (47118 ) |        |        |          |     |            |
| 3   | 741663              | 527601 | 3580   | 2        | PC  | :          |
|     | Clock Nmbr (47118 ) |        |        |          |     |            |
|     |                     |        | 8928   | 5        |     |            |

RECEIVED  
JUL 08 2009

## Notes for CQR: 0222142.2

PRODUCT PRODUCED AND MARKED TO THE REQUIREMENTS OF AMS-QQ-A-250/12 ALSO MEETS THE REQUIREMENTS OF QQ-A-250/12F. PROD UCT  
PRODUCED AND MARKED TO THE REQUIREMENTS OF QQ-A-250/12 F ALSO MEETS THE REQUIREMENTS OF AMS-QQ-A-250/12.  
THIS MATERIAL HAS BEEN ULTRASONICALLY INSPECTED FULLY IMMERSION - TYPE I.  
PRODUCT PRODUCED TO THE REQUIREMENTS OF MIL-STD-2154 ALSO MEET THE REQUIREMENTS OF AMS-STD-2154. PRODUCT PRODUCED TO THE  
REQUIREMENTS OF AMS-STD-2154 ALSO MEET THE REQUIREMENTS OF MIL-STD-2154.  
THIS MATERIAL HAS BEEN ULTRASONICALLY INSPECTED FULLY IMMERSION - TYPE I.

## CQR: 0222142.2 -Specification Limits

| Temp  | Dir                    | UTS | UTS  | EL4D |
|-------|------------------------|-----|------|------|
|       |                        | KSI | KSI  | PCT  |
| T7351 | Long Transv.           | Max | 63.9 |      |
|       |                        | Min | 66.0 | 6    |
| T7351 | Elec. Cond. (RC) % MIN |     | 38.0 | PCT  |

RECEIVED  
JUL 08 2009



001/007

→ D

TRANSARMETALS

07/08/2009 15:35 FAX 203/850/83

## CERTIFIED INSPECTION REPORT

Alcoa Inc.

PITTSBURGH, PA DAVENPORT WORKS

Ship From: RIVERDALE, IA.

We hereby certify that the material covered by this certificate has been inspected with, and has been found to meet, the applicable requirements described therein, including any specifications forming a part of the description and that samples representative of the material met the composition limits and had the mechanical properties shown on the face of this sheet.



Markin Murphy  
Director of Manufacturing Davenport Works

Kenton P. Young  
Quality Assurance Manager

|                            |               |  |                |        |
|----------------------------|---------------|--|----------------|--------|
| 1028639<br>Ship Date       | B<br>B.L. No. | Invoice No.                                | Alcoa No. Item | Page 2 |
| 2009-07-06                 | 4066185       | 00000                                      | 1000117894-1   |        |
| P.O. No./Govt Contract No. | Customer      | Alcoa Item                                 | Mfg Order      |        |
| 8876                       |               | A M CASTLE&COMPAG041139843R02US-17894-01-1 |                |        |

CQR: 0222142.2 -Specification Limits (cont.) -----

| Chemical Composition |     | SI   | FE   | CU  | MN   | MG  | CR   | ZN  | TI   | Other Other |                |
|----------------------|-----|------|------|-----|------|-----|------|-----|------|-------------|----------------|
|                      |     |      |      |     |      |     |      |     |      | Bach        | Total Aluminum |
|                      | Max | 0.40 | 0.50 | 2.0 | 0.30 | 2.9 | 0.28 | 6.1 | 0.20 | 0.05        | 0.15           |
|                      | Min |      |      | 1.2 |      | 2.1 | 0.18 | 5.1 |      |             | REMAIN         |

Alloy 7075  
Lot: 527601 - Mechanical, Physical, Metallography, Quantometer Results -----

| Temp  | Dir          | No--><br>Test | UTS<br>KSI | TYS<br>KSI | EL4D<br>PCT |
|-------|--------------|---------------|------------|------------|-------------|
|       |              |               |            |            |             |
| T7351 | Long Transv. | 3             | 70.7       | 58.8       | 10.6        |
|       |              |               | 71         | 59.6       | 10.5        |
|       |              |               | 69.8       | 58         | 10.5        |

T7351 Elect Cond %IACS 40.2 40.4 40.9 PCT

| Cast Number | Chemical - OES | SI   | FE   | CU  | MN   | MG  | CR   | ZN  | TI   |
|-------------|----------------|------|------|-----|------|-----|------|-----|------|
| H4526036    | Actuals        | 0.05 | 0.27 | 1.7 | 0.01 | 2.5 | 0.19 | 5.7 | 0.02 |

This material was melted in the United States or a Qualifying Country [REF DFARS 225.872.1(a)]; it was manufactured in the United States

# CERTIFIED INSPECTION REPORT

Alcoa Inc.

PITTSBURGH, PA

DAVENPORT WORKS

Ship From: RIVERDALE, IA.

We hereby certify that the material covered by this certificate has been inspected with, and has been found to meet, the applicable requirements described therein, including any specifications forming a part of the description and that samples representative of the material met the composition limits and had the mechanical properties shown on the face of this sheet.

Per:

*Malcolm Murphy*

Malcolm Murphy  
Director of Manufacturing Davenport Works

*Kenton P. Young*

Kenton P. Young  
Quality Assurance Manager

|                            |                          |             |              |      |        |
|----------------------------|--------------------------|-------------|--------------|------|--------|
| 1003162<br>Ship Date       | 0<br>B.L. No.            | Invoice No. | Alcoa No.    | Item | Page 1 |
| 2009-02-21                 | 3489167                  | 00000       | 1000077385-1 |      |        |
| P.O. No./Govt Contract No. | Customer                 | Alcoa Item  | Mfg Order    |      |        |
| 23-14841                   | CASTLE A M G041005634R09 | DS-77385-1  |              |      |        |

Ship To: A M CASTLE & COMPANY  
3050 SOUTH HYDRAULIC  
WICHITA 67216 KS

Item Description  
2.5 IN TK (+.075 -.075) X 48.5 IN W (+.3125 - 0.000) X 144.5 IN LN (+.5 -0.0) CAT D 164168 (N) A/T 7075- T7351 RECTANGLE MILL FINISH, US1 3MM DEAD ZONE REQ'D BOTH SIDES, SAWED IAC 6879 EXC\_MRK A97075-60 REV 24 AMS-QQ-A-250/12 IS 2007 AMS- STD-2154 EXC\_MRK AMS4078 REV G EXC\_MRK ASTMB209 REV 07 ASTMB594 REV 06 BSS7055 REV A EXC\_MRK MMS159 REV N PS21211 REV K ((MARKED)) KRAFT PAPER INTERLEAVED MAX GROSS SKID WGT: 4500 LB QUAN TOL +/- 25 % US1 CL A 3 MM CQR 0137890 REV 18 CUST REQ 09-02-20 \*\*\* W/E 09-02-28 \*\*\*

| Num | Package Ticket | Lot      | Weight | Quantity | UOM | Pc Id/Serl |
|-----|----------------|----------|--------|----------|-----|------------|
| 1   | 717567         | 433111 ✓ | 3571   | 2        | PC  |            |

Notes for CQR: 0137890.18  
PRODUCT PRODUCED TO THE REQUIREMENTS OF MIL-STD-2154 ALSO MEET THE REQUIREMENTS OF AMS-STD-2154. PRODUCT PRODUCED TO THE REQUIREMENTS OF AMS-STD-2154 ALSO MEET THE REQUIREMENTS OF MIL-STD-2154.  
THIS MATERIAL HAS BEEN ULTRASONICALLY INSPECTED FULLY IMMERSION - TYPE I.  
PRODUCT PRODUCED AND MARKED TO THE REQUIREMENTS OF AMS-QQ-A-250/12 ALSO MEETS THE REQUIREMENTS OF QQ-A-250/12F. PRODUCT PRODUCED AND MARKED TO THE REQUIREMENTS OF QQ-A-250/12 F ALSO MEETS THE REQUIREMENTS OF AMS-QQ-A-250/12.  
THIS MATERIAL HAS BEEN ULTRASONICALLY INSPECTED FULLY IMMERSION - TYPE I.

CQR: 0137890.18 -Specification Limits

| Temp  | Dir              | UTS   | TYS  | EL4D |
|-------|------------------|-------|------|------|
|       |                  | KSI   | KSI  | PCT  |
| T7351 | Long Transv.     | Max   | 63.9 |      |
|       |                  | Min   | 52.0 | 6    |
| T7351 | Elec. Cond. (EC) | % MIN | 38.0 | PCT  |

| Chemical Composition | SI  | FE   | CU   | MN  | MG   | CR  | ZN   | TI  | Other |       |
|----------------------|-----|------|------|-----|------|-----|------|-----|-------|-------|
|                      |     |      |      |     |      |     |      |     | Each  | Total |
| Alloy 7075           | Max | 0.40 | 0.50 | 2.0 | 0.30 | 2.9 | 0.28 | 6.1 | 0.20  | 0.05  |
|                      | Min |      |      | 1.2 |      | 2.1 | 0.18 | 5.1 |       | 0.15  |

REMAIN

CASTLE METALS-WIC

DATE REC'D 2-23-09

REC'D FROM 5744

APPROVED BY *CB*

T-452 P011/014 F-352

3165223453

02-24-'09 07:45 FROM-a m castle metals

T-452 P012/014 F-352

3165223453

3165223453

CERTIFIED INSPECTION REPORT

Alcoa Inc.

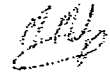
PITTSBURGH, PA

DAVENPORT WORKS

Ship From: RIVERDALE, IA.

We hereby certify that the material covered by this certificate has been inspected with, and has been found to meet, the applicable requirements described therein, including any specifications forming a part of the description and that samples representative of the material met the composition limits and had the mechanical properties shown on the face of this sheet.

Per:



Malcolm Murphy

Director of Manufacturing Davenport Works



Karen P. Young

Quality Assurance Manager

|                            |            |               |            |           |      |
|----------------------------|------------|---------------|------------|-----------|------|
| 1003162                    | 0          |               |            |           |      |
| Ship Date                  | B.L. No.   | Invoice No.   | Alcoa No.  | Item      | Page |
| 2009-02-21                 | 3489167    | 00000         | 1000077385 | -1        | 2    |
| P.O. No./Govt Contract No. | Customer   | Alcoa         | Item       | Mfg Order |      |
| 23-14841                   | CASTLE A M | G041005634R09 | DS-77385-1 |           |      |

COR: 0137890.18 -Specification Limits (cont.)

Lot: 433111 - Mechanical, Physical, Metallography, Quantometer Results

| Temp  | Dir          | No-> | UTS  | TYS  | EL4D |
|-------|--------------|------|------|------|------|
|       |              | Test | KSI  | KSI  | PCT  |
| T7351 | Long Transv. | 3    | 69.9 | 58.2 | 10.5 |
|       |              |      | 69.5 | 58.2 | 10.8 |
|       |              |      | 69.6 | 58.1 | 10.7 |

T7351 Elect Cond %IACS 40.7 41.4 40.8 PCT

| Cast Number | Chemical - OBS | SI   | FE   | CU  | MN   | MG  | CR   | ZN  | TI   |
|-------------|----------------|------|------|-----|------|-----|------|-----|------|
| H9167054    | Actuals        | 0.07 | 0.28 | 1.6 | 0.03 | 2.5 | 0.19 | 5.7 | 0.02 |

This material was melted in the United States or a Qualifying Country [REF DFARS 225.872.1(a)]; it was manufactured in the United States